

February 24, 1998

Dear Workshop Participants:

**INDEPENDENT SYSTEM OPERATOR (ISO) ADDITIONS/REVISIONS TO THE
SUMMARY OF THE JANUARY 8, 1998, HIGH DESERT POWER PROJECT
TRANSMISSION ISSUES WORKSHOP**

The ISO has asked the Commission to make some additions and revisions to the enclosed staff' summary which you received, of the High Desert Power Project transmission issues workshop that was held at the Energy Commission on January 8, 1998. The additions are shown in redline, and the deletions are shown in strikeout form.

If you would like to make any other changes or additions to the summary, please send them to me in writing. I will see that they are placed in the project file and that the appropriate staff and other meeting participants receive them. Please call me at (916) 653-1614 if you have any questions.

Sincerely,

Richard K. Buell
Siting Project Manager
California Energy Commission
1516 9th Street, MS-15
Sacramento, CA 95814

Enclosure

cc: Proof of Service

HIGH DESERT POWER PROJECT (HDPP)

Transmission Issues Workshop Summary
1/8/98

Workshop Participants

See attached list

The Commission's HDPP project manager, Rick Buell, opened the workshop. Rick explained that the purpose of the workshop was to discuss the HDPP need for a transmission interconnect study and other transmission issues.

Information needs

Al McCuen of the staff summarized the Commission's regulatory requirements for the transmission area. The Commission must make findings that address:

- How a new generating unit would be accommodated in the transmission system based on local area reliability criteria (ie, Southern California Edison's) and Western Systems Coordinating Council (WSCC) criteria
- Identification of the direct and indirect consequences of the project (ie, California Environmental Quality Act implications)

How the project complies with laws, ordinances, regulations, and standards (LORS), including new standards currently being developed by the Independent System Operator (ISO) and others

Al also summarized his understanding of the ISO Control Agreement Requirements. The merchant plant developer must:

- provide obligatory access to ISO controlled grid
- show conformance with interconnection standards
- enter into an interconnection agreement.

The ISO must:

- coordinate with transmission participants
 - Transmission Owners (TOs)
 - Transmission Receivers (TRs)

- responds to participants' comments on the reliability of interconnection.

Al said that he understood that the ISO was currently developing interconnection standards. At this point they are using standards developed by the existing TOs.

Al asked if any of the participants had any concerns about the ISO control agreement,

and asked whether they would be able to work with it. Dave Larson of RMI (ie, consultant to HDPP) responded that he could work with it.

The ISO representatives noted that the ISO transmission control agreement (TCA) is still in draft form. At the request of the ISO, some key sections are replicated below.

10.2.1 Obligation to Interconnect.

The Parties shall be obligated to allow interconnection to the ISO Controlled Grid in a non-discriminatory manner, subject to the conditions specified in this Section 10 and the applicable legal requirements.

10.2.2 Standards.

All Interconnections shall be designed and built in accordance with Good Utility Practice, all Applicable Reliability Criteria, and applicable statutes and regulations.

10.2.3 System Upgrades.

A Participating TO shall be entitled to require a entity requesting Interconnection to pay for all necessary system reliability upgrades on its side of the Interconnection and on the ISO Controlled Grid, as well as for all required studies, inspection and testing, to the extent permitted by FERC policy. The entity requesting Interconnection shall be required to execute an Interconnection Agreement in accordance with the TO Tariff and must comply with all of its provisions, including provisions related to creditworthiness and payment for Facility Studies.

10.4.2 Coordination with Participating TOs.

The ISO shall coordinate with each Participating TO in processing Interconnection requests. In that regard, the ISO shall (1) review each Participating TO's current procedures for coordinating Interconnection requests made in accordance with Section 10.3.4, (2) review individual Interconnection requests and all related Participating TO studies, and (3) forward any comments or additional requirements to the Participating TO for transmittal to the entity requesting Interconnection.

The ISO representatives said that they were considering North American Electric Reliability Council (NERC) and WSCC criteria as they were working to develop interconnection standards as part of a model TCA.

Ron Nichols of RMI explained that HDPP had not come forward yet with a formal request for an interconnection study because the ISO formative situation and requirements were so uncertain.

AI stated that the Commission has the following transmission information needs when reviewing an AFC for a power plant:

- basic transmission engineering project description and study
- interconnection study
- power flow modeling
- stability study
- fault current analysis
- conformance with LORS

AI needs the ISO staff to participate in the Commission's process to the point where it does not have any major surprises.

Gary Schoonyan of Southern California Edison (SCE) said that SCE is willing to work with the other transmission parties on the interconnection study.

Dave Marcus, representing California Unions for Reliable Energy (CURE) said that Commission information needs should also include how HDPP would mitigate the transmission system impacts of its project. AI said that he was assuming that the interconnection study would discuss mitigation options. He would expect the interconnection analysis to restudy the system with mitigation options in place. The analysis should identify problem areas and then go through iterations (ie, go through a number of drafts with multiple reviewers).

Dave Marcus asked whether the ISO planned to make any studies of the HDPP. The ISO representatives responded that they are interested in all information. HDPP will be integrated into their current "must run" studies as a sensitivity case. They will try to have these available in April 1998.

Dave Marcus said that all parties need to reflect each other's studies; identify any common assumptions; and identify problem areas. The varying parties' needs will result in the studies having different focuses (e.g., HDPP will focus on Lugo sub area whereas an ISO must-run study may focus more on the San Francisco Bay Area). Gary noted that there is a lot of debate in this area. Allan Thompson, counsel to HDPP, said that HDPP wants to mitigate impacts directly caused by the project, rather than miscellaneous impacts.

Dave Marcus asked whether HDPP envisions three different interconnection studies based on its three different configurations, or whether they plan to go with the worst case. Caryn Hough, Commission staff attorney, said that it isn't clear yet what a worst case transmission analysis will show. The implications for the Commission conditions of certifications are uncertain. Dave Larson said that that the worst case analysis may also provide other useful information.

One of the ISO representatives asked if the Commission would approve the HDPP if the interconnection study showed that the project could not go to full load (i.e., produce full MW capacity) without creating downstream transmission congestion problems ~~what would happen to the system if HDPP goes below its forecasted load.~~ AI asked if HDPP would be willing to curtail as a potential mitigation measure.

Communication process

Al said that the Commission's regulatory process currently inhibits his discussions with the various parties. Rick said that the Commission staff would like to have a better communication process, balancing the open, public process which can be time consuming, and quick, informal exchanges between the interested parties. Al noted that he can't talk with the applicant about substantive items unless the discussion is part of a noticed public workshop. Yet he can talk to entities that aren't parties to the case.

Caryn said that if a party is trying to resolve an issue, it should not be done outside of a public workshop. However, if you are only seeking information or clarification, you can use the phone and write a report of conversation (ROC) for that phone call. Similarly, E-mail is fine for seeking information or clarification, but you should keep a copy of the E-mail. The staff often docket pertinent ROCs and E-mails, but this is not required.

Rick said that those who wanted to could put their E-mail addresses on the sign-in sheet for exchange of routine information. Allan said that this was fine for HDPP.

Interconnection studies

Al said that he wanted to discuss the options for conducting interconnection studies. One approach would be for all parties to review and comment on RMI's existing interconnection study, and then iterate it. The ISO representatives said that it was not clear who needs to do the study. SCE could do the study but an independent party could also. The transmission owner must do it if requested.

Gary responded that SCE is going to do the interconnection study for HDPP. Dave Marcus asked whether HDPP intends to have RMI do further transmission studies. HDPP representatives said that they were not sure yet. Al said that he has asked HDPP/RMI to do a stability study.

Dave Larson said that the data needed for a stability study is not readily available. RMI is very careful of confidential data when doing studies for various clients. Furthermore, the currently available data may be obsolete now. Al said that he still thinks a stability study would be useful and that RMI could call SCE and ask for stability data.

Gary said that HDPP should formally request an interconnection study, and do it soon. It will be SCE's study, but they will work with others. The ISO representatives said that they would need copies of correspondence between HDPP and SCE.

Andy Welch of HDPP said that HDPP will polish up their draft interconnection study proposal which was prepared in Spring '97, and give it to SCE. The ISO representatives asked that they be sent a copy of HDPP's request to SCE for a study. Allan Thompson, counsel for HDPP, responded that HDPP considers itself in a pre-

litigation position with the unions, as represented by CURE. Any interconnection study information could be used by the unions to kill the project. In order to protect his client, he would resist an all parties' view of their draft interconnection study material.

Caryn noted that potential conflicts between HDPP's pre-litigation position of selective disclosure and limited discussion of its interconnection material, and CURE's position of full disclosure and public discussion, could adversely affect the Commission Committee's schedule for the project. She said that the scope of the study needs to be made public, with all parties commenting. This needs to be worked out in a way that does not hamper the schedule.

Allan said that the scope of the study would be a subject for discussion between HDPP and SCE, with the ISO receiving all material. Dave Marcus, and Lizanne Reynolds of Adams Broadwell & Joseph representing CURE, said that nobody was seeking public disclosure of interconnection assumptions. Instead, CURE is looking for a discussion of the study's scope, such as whether a stability study would be included. AI noted that it would be advantageous for the Commission staff and others to discuss the study scope (e.g. whether it would include a post-transient analysis), in order to avoid surprise information needs later.

Rick asked whether SCE could participate in a public workshop on the scope of the study. Gary responded that SCE would keep the details confidential, but that it would be able to discuss the scope in public. The ISO representatives said that they would need to have all of the interconnection study information. Allan responded that HDPP would prefer to discuss the scope of the study with SCE privately.

Rick encouraged HDPP to participate in a public workshop on the scope of the study, which will help meet the schedule. Allan responded that HDPP might not attend a public workshop on this topic. He thinks that HDPP has been very cooperative with the staff, as far as responding to the information required in the Commission's regulations. However, the burden of meeting the schedule rests with the applicant. HDPP does not submit all of its air quality assumptions routinely, and the transmission area should be handled similarly. HDPP will live by the Commission's rules, but that doesn't mean making all information public. The ISO representatives noted that the transmission area is different from the air quality area.

Rick said that the Commission is not seeking a highly scrutinized process either, but it does want to include all relevant information. The licensing process may take longer than one year if this issue of the degree of public disclosure of transmission interconnection information is not resolved quickly. Allan responded that HDPP accepted the risk of the licensing process being delayed.

Allan asked whether the ISO has a mechanism to pay for interconnection study items that HDPP and/or SCE does not think are necessary. The ISO representatives responded that in any case, ISO approval would be needed in order for the project to operate (i.e. have its interconnection to the ISO Controlled Grid energized) ~~transmission system to work.~~

Roger Johnson of the staff asked what the Los Angeles Department of Water and Power's (LADWP) role was in the interconnection study process. Al said that he wanted them to be involved and he would discuss this workshop with them. Gary said that SCE does not routinely send interconnection study material to other parties, such as LADWP and the other municipal utilities, unless they are directly affected. The ISO representatives said that given a project with the size of the HDPP, that they would like all WSCC participants to have access to the material.

Gary said that he can't see sending all this material to a remote area like Montana. If the ISO wants to they could. Al said that a project like the HDPP can be listed on a Western Region Transmission Association (WRTA) electronic bulletin board.

Dave Marcus asked who the staff has contacted regarding the transmission aspects of the HDPP. Al responded that he has contacted WRTA, WSCC, ISO, SCE, LADWP, and CURE. Allan noted that the very competitive nature of the power market can't be forgotten when various parties are exchanging information. Al said that remote entities (e.g., Arizona Public Service) should speak up early if they have an interest. Dave Marcus said that the people who have scheduling interests (e.g., the entities who might use Lugo substation) would have notification priority over remote entities which might have an anti-competitive position.

Al noted that in an interconnection study SCE will likely consider project conformance with WSCC reliability criteria. Gary responded that they certainly will take WSCC criteria into account, but they won't run public seminars.

Caryn observed that HDPP is ready to ask SCE to do an interconnect study, and SCE is ready to do it. The Commission and the ISO are concerned with information/discussion rights of other system users (e.g., those who could also go through Lugo substation). Dave Marcus and Lizanne said that SCE's position of wanting to involve all parties is good, but the parties need to know what is happening and receive information.

Rick said that the responsibility for ensuring information flow between all transmission stakeholders may rest between the Commission and the ISO. The Commission and ISO staffs could discuss this later. Al said that perhaps the Commission staff should meet with the ISO to discuss responsibilities and communications.

Al said that Calpine's Sutter Power Project was listed on a WRTA bulletin board because the Sacramento Area Transmission Planning Group recognized an area problem. Morteza Sabet of Western Area Power Administration worked to get the Calpine project listed and discussed.

Allan said that he was concerned that the Commission and the rest of the parties may be asking HDPP to do a study, and open up all contractual arrangements for public scrutiny. Rick and Caryn responded that the Commission and others would like to

comment on the scope of the study.

Rick suggested that HDPP and all other interested parties participate in a workshop to discuss the study scope. Allan said that HDPP needs to work out the study with SCE independently and then get back to the Commission with the results. HDPP is in a pre-litigation position with CURE. Therefore he needs to protect his client. He is not sure that HDPP would be able to attend or participate in a workshop on the scope of the interconnection study.

Allan said that he understood Rick's position that declining a workshop to discuss the scope of the interconnection study may delay the schedule. HDPP will deal with that consequence if it occurs. He feels strongly that HDPP has and will be providing all the information required by the Commission's rules and regulations.

Caryn said that the parties can voice their opinions on perceived technical omissions, and pursue this with the ISO. Allan proposed that parties send HDPP a list of items they would like to see included in the interconnection study.

Next Steps (Who, What, and When?)

Rick asked whether HDPP was interested in a workshop to discuss the scope of the interconnection study. Rick said that staff thinks an open discussion of the study scope rather than detailed nuances, would be very helpful. Allan responded that HDPP is willing to send out a letter to all parties stating what they are considering for the interconnection study. The Commission and the ISO will do the same on what they need.

HDPP would request responses from all interested parties in two weeks (ie, by 1/23/98), which they would compile, docket, and send to the proof of service list. All interested parties should E-mail their responses to Andy Welch. HDPP would then meet with SCE to discuss study features, costs, etc. The soonest the study could start would be the end of January. This would depend on SCE's schedule.

Al said that based on his informal discussions with SCE, he understood that an interconnection study would take approximately 16 weeks to complete. Al said that he thinks power flow analysis will be a key item. He understood that the power flow, stability, and fault current portion of the study would take approximately four weeks to complete. At that time, SCE may evaluate transmission system impact mitigation measures and iterate the study. 16 weeks is a long time for the staff to wait for transmission information and complete its analysis on time. Discrete pieces which are completed earlier than 16 weeks would be helpful.

Rick asked whether it would be helpful to have periodic workshops on the transmission milestones that have been reached. Al said that a workshop(s) may not be necessary. The ISO representatives agreed that they want to keep up on the milestones achieved.

Staff Discussion Topics 1-11

These topics were included in staff's 12/17/97 set of data requests to HDPP. Allan responded that HDPP is treating all of the transmission discussion topics as data requests. HDPP plans to respond to all of them by 1/16/98.

Al noted that for topic #6b, he needed the capacity (MW) for each generating unit. Dave Marcus clarified and reiterated his interest in the status of the Mira Loma substation. Actual base case conditions should indicate that Mira Loma does not have a fourth transformer. Dave Larson responded that HDPP had gone with the best Mira Loma information available when HDPP's preliminary transmission study was prepared. Al said that he understood that SCE is actually considering placement of a fourth transformer at Mira Loma.

To conclude the workshop, Rick listed the following action items:

1. Andy Welch will send an HDPP letter to transmission stakeholders; in order to include all relevant entities, parties should fax him a list of transmission stakeholders no later than noon on 1/9/98.
2. By 1/23 send comments on the above letter to Andy.
3. HDPP and SCE will meet to hammer out a transmission interconnection study.
4. Possible release of interim products from the study.
5. Possible workshop to discuss progress on milestones.

Rick said that the staff may hold noticed data response workshops in late January or early February, which may include transmission topics.

**HIGH DESERT POWER PROJECT
97-AFC-1
JANUARY 8,1998 TRANSMISSION ISSUES WORKSHOP**

LIST OF PARTICIPANTS

Richard Buell
California Energy Commission (CEC)
1516 Ninth Street
Sacramento, CA 95814

David Marcus
P.O. Box 358
Berkeley, CA 94701-0358

Lizanne Reynolds
Adams Broadwell & Joseph
651 Gateway Blvd., Ste. 900
South San Francisco, CA 94080

Andrew Welch
HDPP
3501 Jamboree Road
Newport Beach, CA 92660

Allan Thompson
4 Embarcadero Center, 17th Floor
San Francisco, CA 94111

Robert Sparks
California ISO
151 Blue Ravine Road
Folsom, CA 95630

David Larsen
RMI/HDPP
3100 Zinfandel, Ste. 600
Rancho Cordova, CA 95670

Gary Schoonyan
Southern California Edison
601 Van Ness, Ste. 2040
San Francisco, CA 94162
Ron Nichols
RMI/HDPP
3100 Zinfandel, Ste. 600

Rancho Cordova, CA 95670

Ron Calvert
California ISO
151 Blue Ravine Rd.
Folsom, CA 95630

John Grattan
Miller, Karp, & Grattan
980 Ninth St, 16th Floor
Sacramento, CA 95814

Caryn Hough
CEC
1516 9th St.
Sacramento, CA 95814

Jon D. Edwards
CEC
1516 9th St.
Sacramento, CA 95814

Al McCuen
CEC
1516 9th St.
Sacramento, CA 95814

Mike DeBortoli
Calpine
1160 N. Dutton Ave., #200
Santa Rosa, CA 95401

Eileen Allen
CEC
1516 9th St.
Sacramento, CA 95814

Manuel Alvarez

SCE
1201 K Street
Sacramento, CA 95814

Roger E. Johnson
CEC
1516 Ninth Street
Sacramento, CA 95814